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United States Patent [19]

Hendry et al.

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[54] **SYSTEM FOR DYNAMICALLY ACCOMMODATING CHANGES IN DISPLAY CONFIGURATION BY NOTIFYING CHANGES TO CURRENTLY RUNNING APPLICATION PROGRAMS TO GENERATE INFORMATION BY APPLICATION PROGRAMS TO CONFORM TO CHANGED CONFIGURATION**

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[58] **Field of Search** 395/275, 164, 395/828, 837, 283, 284, 162, 653, 342, 836, 165, 682

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[57] **ABSTRACT**

A display management architecture detects changes in a display environment and notifies software programs, such as the operating system and applications programs, of the changes to enable them to adjust accordingly. The display management system comprises one part of the computer's operating system, and includes a display manager that provides communication channels between the operating system, other software programs, display drivers and video drivers. The display manager receives information from the drivers regarding the display capabilities of associated display devices, and provides reconfiguration services to other software within the computer. When a change in the display environment occurs, the display manager notifies the software programs of the changes, to enable them to dynamically update or reconfigure the displayed information accordingly. If a program is not able to respond to such a notification, the display manager repositions displayed objects in accordance with the new display environment. All of these actions take place in a real-time fashion while the computer is running, and avoid the need to restart the computer before any changes can take effect.

35 Claims, 6 Drawing Sheets

